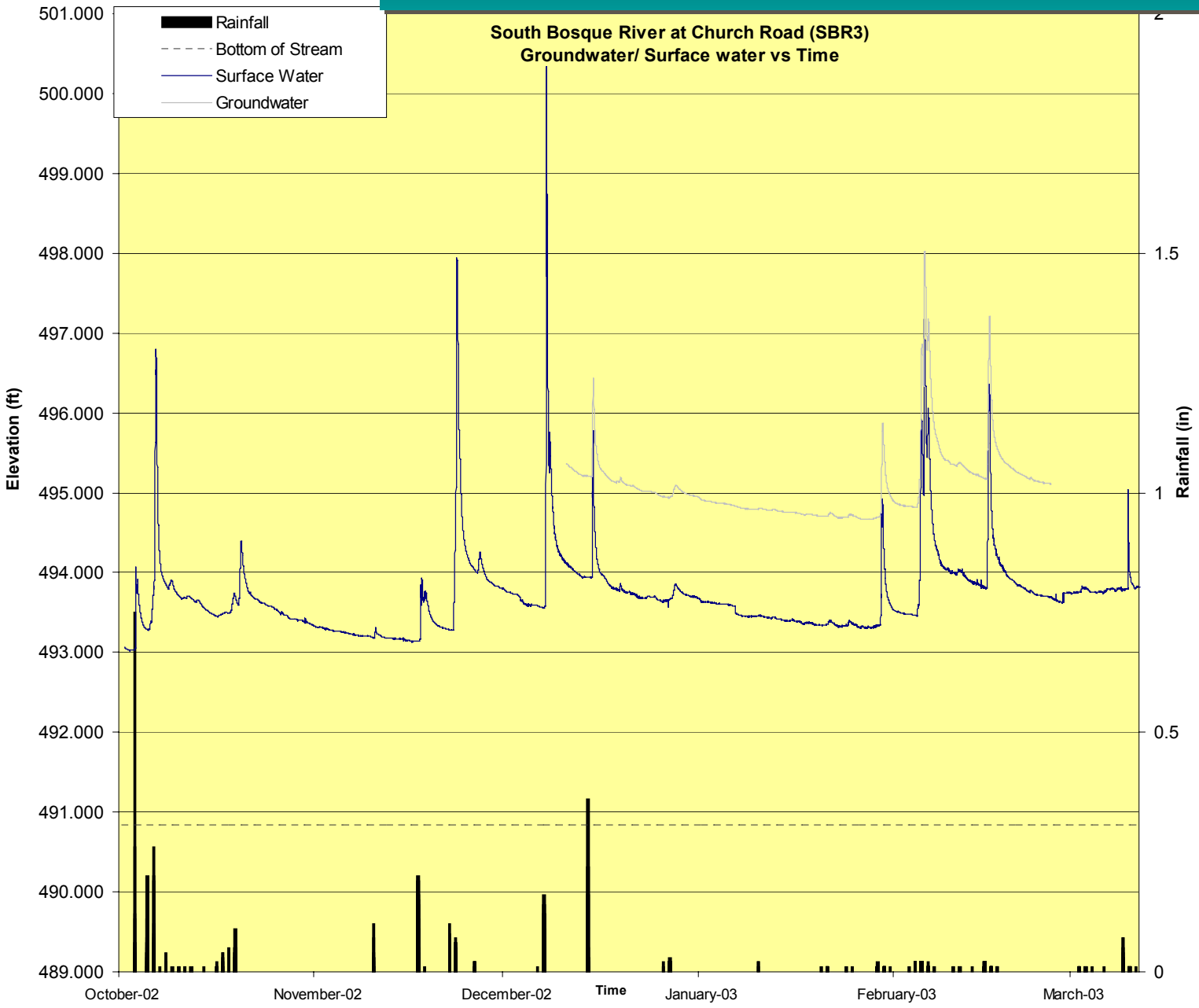
Surface Water levels, Groundwater levels and Rainfall Relationships



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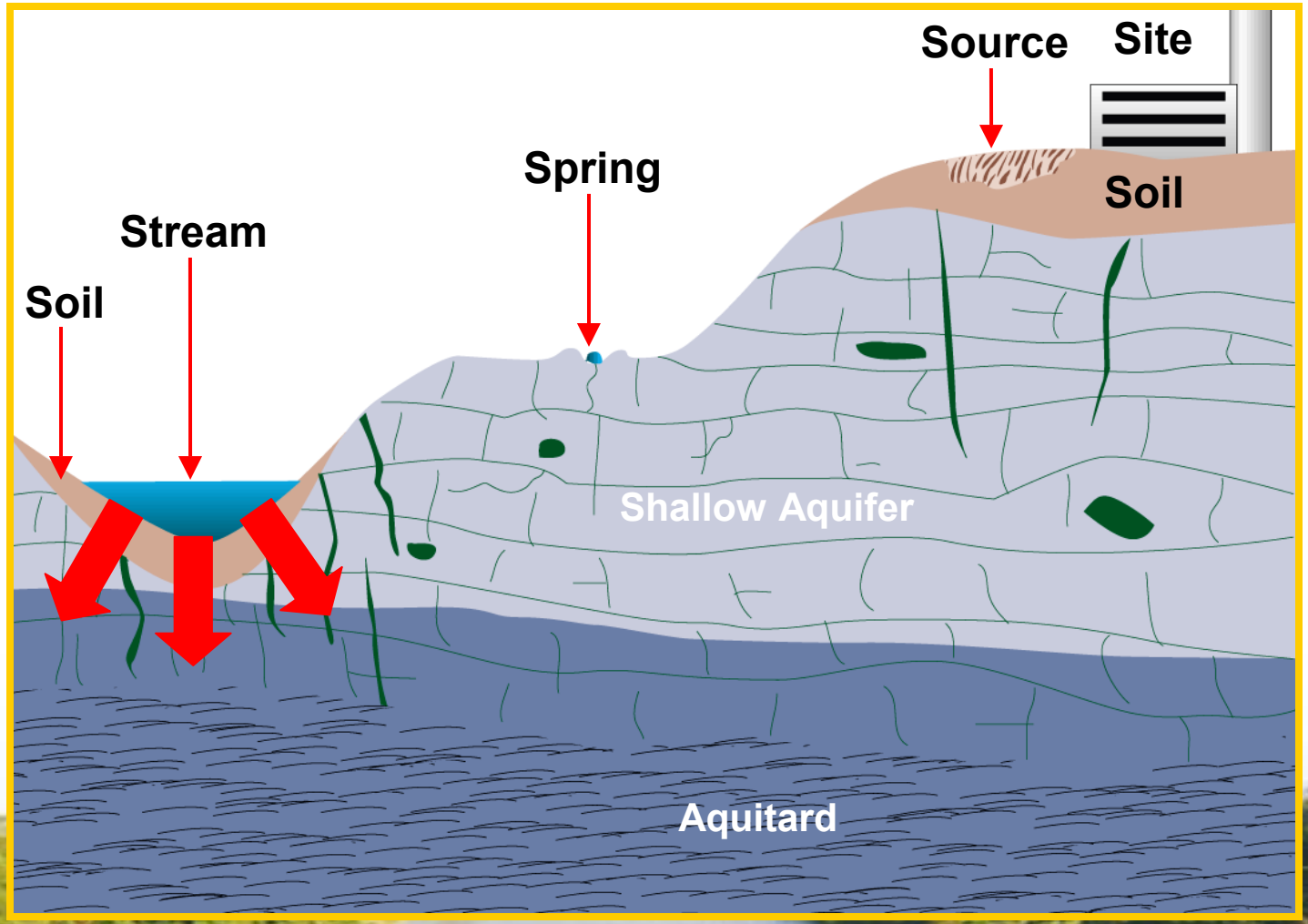
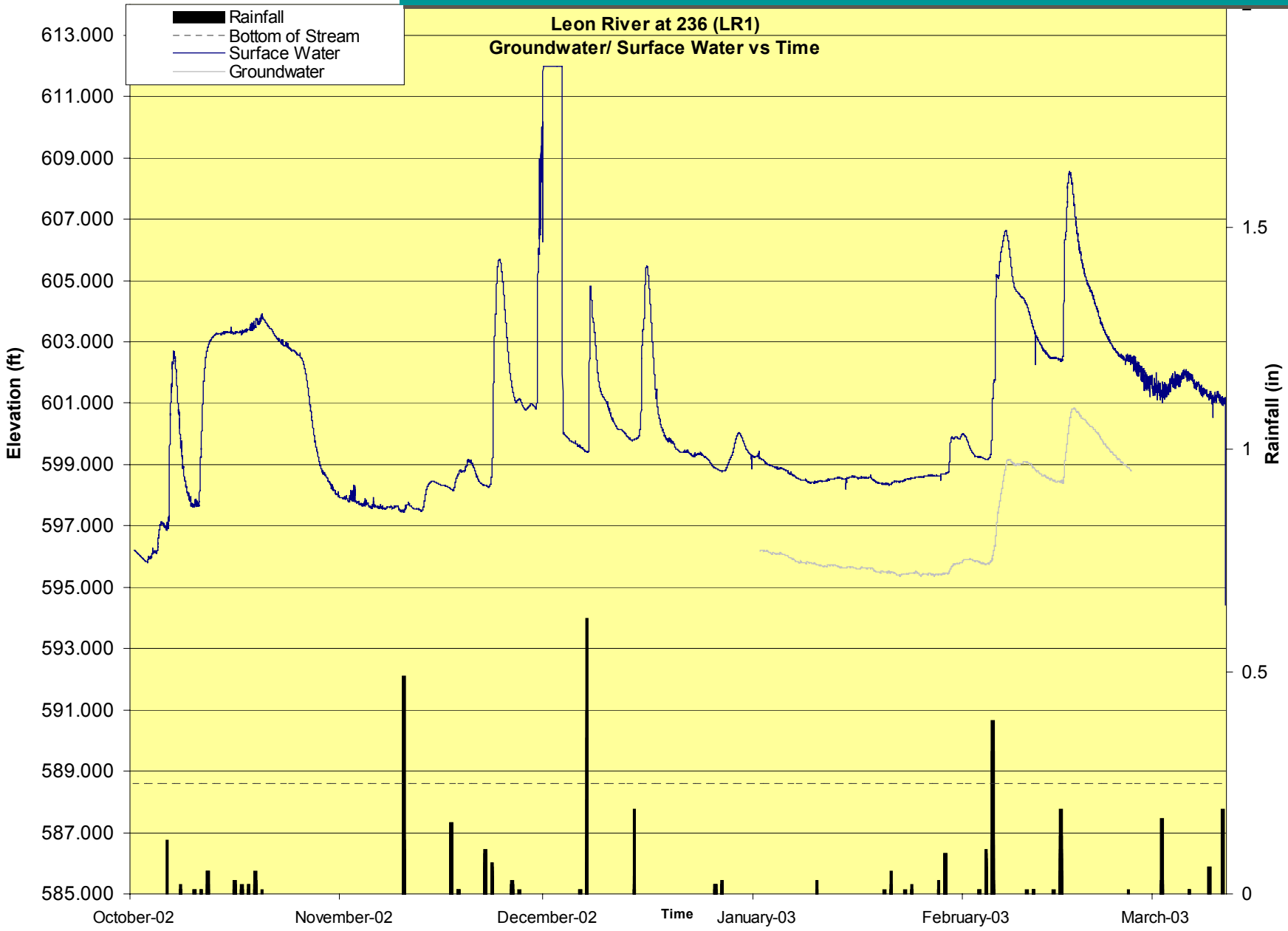
Conceptual Site Model
"Losing" Stream



Surface Water levels, Groundwater levels and Rainfall Relationships



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Lake Belton Anoxic Study

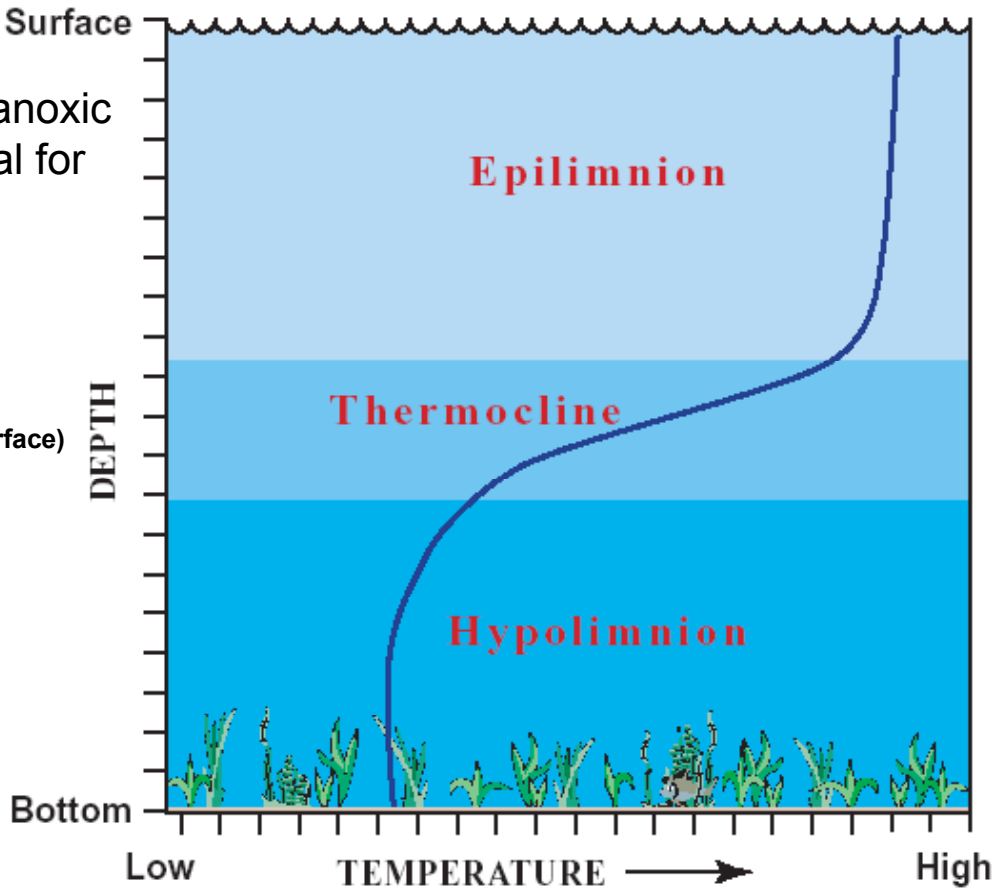
Objective:

To provide a better understanding of the anoxic component of Lake Belton and its potential for perchlorate reductive metabolism

Field activities completed:

Collected samples from

- **Deep1** : **Sediment, Water (Bottom, Thermocline & Surface)**
- **Deep 2** : **Sediment**
- **Deep 3** : **Sediment**
- **Shallow 1** : **Sediment, Water (Bottom)**
- **Shallow 2** : **Sediment**
- **Shallow 3** : **Sediment**



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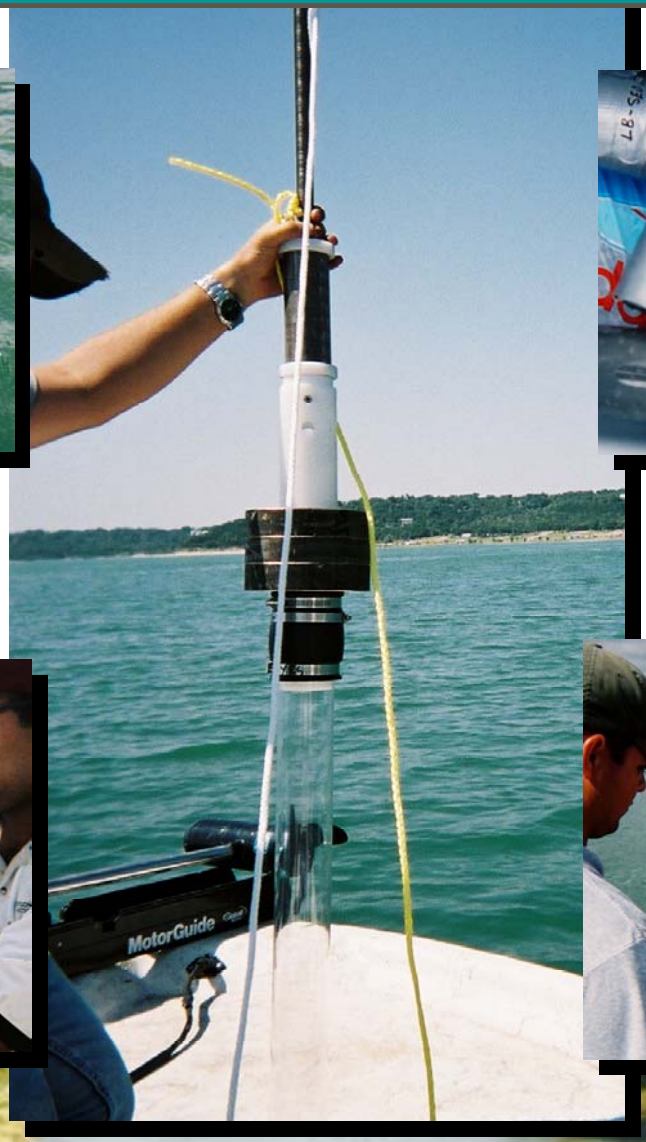
Lake Belton Anoxic Study

(Retrieval of Sediment and Surface Water samples from Lake Belton)



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Lake Belton Anoxic Study
(Experimental Approach)

Impacts on perchlorate degradation from:

- **Medium (Sediment & Water)**
- **Medium variability**
- **Nutrients & Minerals**
- **Oxygen**
- **Temperature**

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Lake Belton ADCP Study

Objective:

To better understand the flow patterns within Lake Belton.

Activities completed:

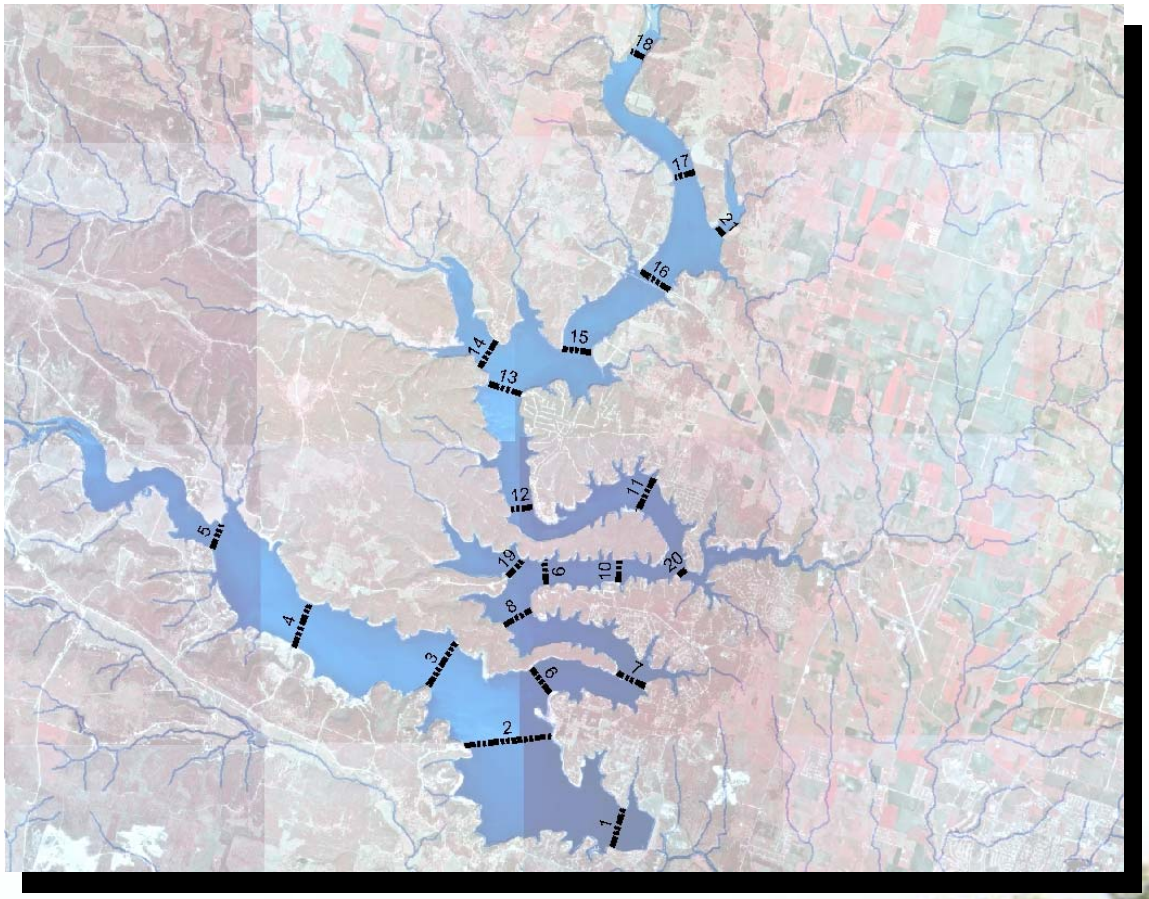
Spring 2003 event

Summer 2003 event

Activities to be conducted:

Fall 2003 event

Winter 2003 event



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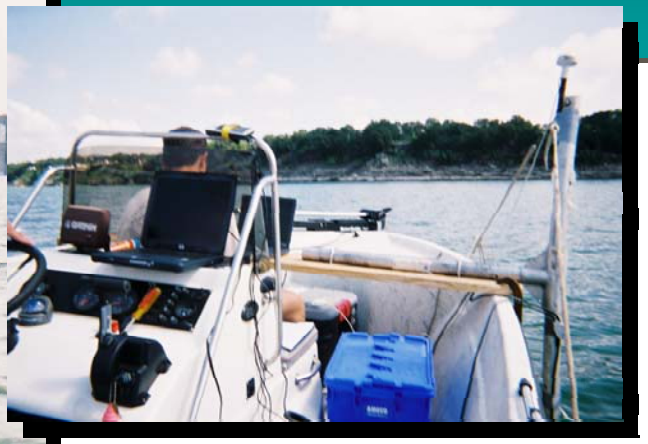
Lake Belton ADCP Study
(Survey across 21 transects in Lake Belton)



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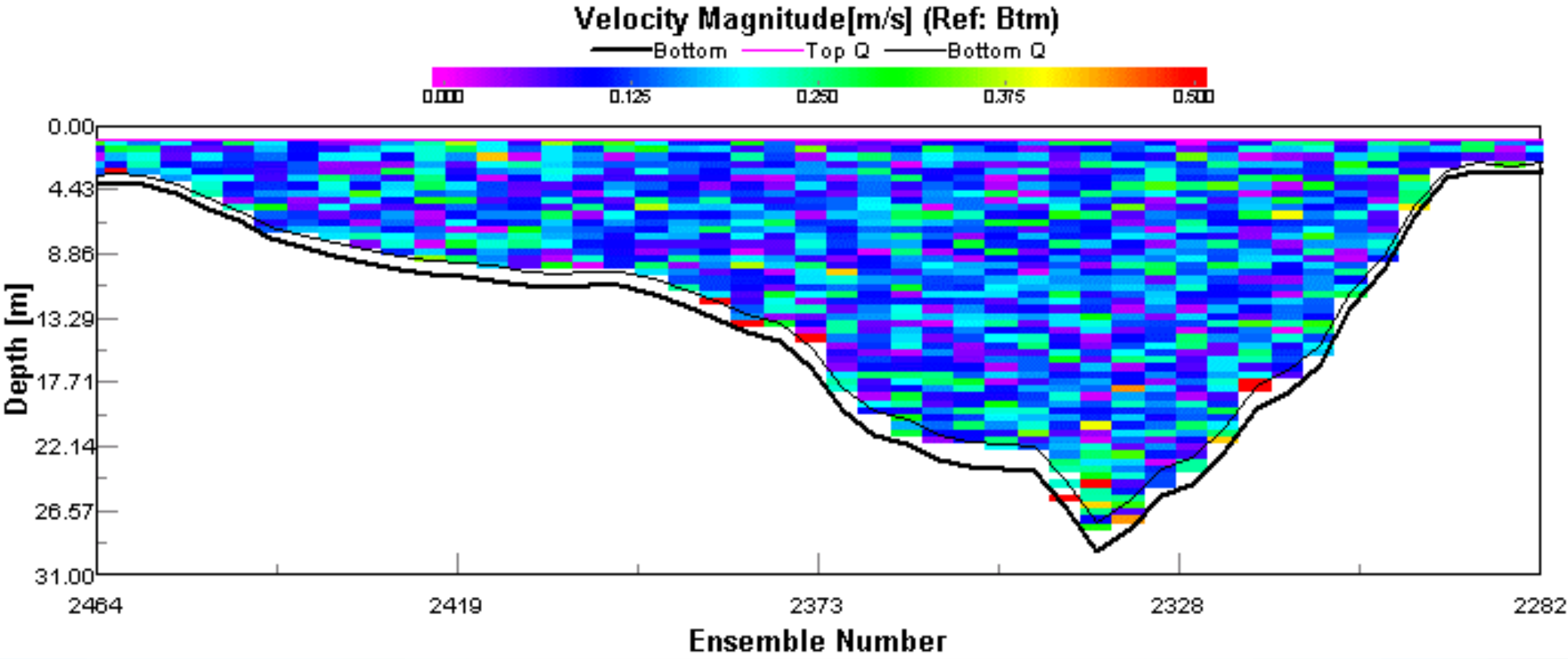
Transect Cross Section and Flow Patterns



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Lake Belton ADCP Study Observations

- Spring 2003 : Intuitive channel flow mostly in thalwegs – affected by wind, water level, and temperatures
- Summer 2003 : Uniform “slow” channel flow below the thermocline with some eddies – affected by wind
- Water temperatures during Summer nearly 50°F warmer than Spring